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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,977	03/01/2002	Peter Ott	01024	2208
7590	06/18/2004		EXAMINER	
Walter Ottesen Patent Attorney P.O. Box 4026 Gaithersburg, MD 20885-4026			FINEMAN, LEE A	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/084,977	OTT, PETER	
	Examiner	Art Unit	
	Lee Fineman	2872	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-19 and 23-27 is/are allowed.
- 6) ☒ Claim(s) 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/3/03</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 2872

### **DETAILED ACTION**

1. Applicant's request for reconsideration of the rejection of the last Office action is persuasive and, therefore, the applicant's amendment and response filed 1 June 2004 will be entered and considered. Claims 23, 25 and 26 were amended and claim 28 was cancelled. Claims 17-27 are pending.

### ***Election/Restrictions***

2. Based on applicant arguments, the restriction requirement stated in the previous office action has been withdrawn and all claims will be examined.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al., U.S. Patent No. 6,179,448 B1 in view of Nishi, U.S. Patent No. 5,861,944.

Regarding claim 20, Johnson et al. disclose a microscope comprising a specimen table (2); a light unit (12) for supplying a light for illumination along an illuminating beam path (fig. 1) devoid of a beam homogenizer; motor drives (30) for adjusting said light unit relative to said illuminating beam path; a microscope objective (6) defining a pupil plane; a detector (32) for

Art Unit: 2872

detecting the light power of the light; and an evaluation and control computer (34), connected to said detector and functioning to sequentially drive said motor drives until a maximum of an integral light power is measured with said detector (fig. 1; column 4, lines 13-38). Johnson et al. disclose the claimed invention except for the detector being integrated into said specimen table. Nishi teaches a system (fig. 1) for adjusting light intensity that includes a detector (58) integrated into the specimen table (57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to integrate the detector into the specimen table in the system of Johnson et al., as suggested by Nishi, to provide a compact system that will provide accurate intensity information very near the exposure point of the specimen.

Regarding claim 21, Johnson et al. further disclose wherein said microscope defines an optical axis along said beam path (fig. 1); and wherein said microscope further comprises a collector optic (78, fig. 6) mounted in said illuminating beam path downstream of said lamp unit; an additional motor drive (84) for displacing said collector optic along said optical axis.

*Allowable Subject Matter*

5. Claims 17-19 and 23-27 are allowed.
6. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is an examiner's statement of reasons for allowance:

Claim 17-19 and 23-27 allowable over the prior art and claim 22 has allowable subject matter over the prior art for at least the reason that the prior art fails to teach and/or suggest

Art Unit: 2872

“determining the maximum gradient of the light power in dependence upon a position change of said lamp unit relative to said illumination beam path” and “displacing said lamp unit in a direction of the maximum gradient of the integral light power until the light power detected by said detector is a maximum” as set forth in the claimed combination.

Gradient is being interpreted in light of the applicant's remarks on page 10, line 20-page 11, line 17. Johnson et al. discloses a microscope with a light unit (12) for supplying a light for illumination along an illuminating beam path (fig. 1) devoid of a beam homogenizer; motor drives (30) for adjusting said light unit relative to said illuminating beam path; a microscope objective (6) defining a pupil plane; a detector (32) for detecting the light power of the light; and an evaluation and control computer (34) connected to said detector and functioning to sequentially drive said motor drives until a maximum of an integral light power is measured with said detector (fig. 1; column 4, lines 13-38) but does not have wherein a maximum gradient of the light power in dependence upon a position change of said lamp unit relative to said illumination beam path is determined and said lamp unit is displaced in a direction of the maximum gradient of the integral light power until the light power detected by said detector is a maximum as claimed.

### ***Response to Arguments***

8. Applicant's arguments filed 1 June 2004 with regards to claims 20 and 21 have been fully considered but they are not persuasive.

Applicant argues that Nishi is more analogous to a transmission microscope and therefore does not have a detector mounted in the correct analogous position (the “object stage” which

Art Unit: 2872

corresponds to the reticle stage) so one of ordinary skill in the art would not be able to derive of arranging a detector in the specimen stage. First, it is noted that the features upon which applicant relies (i.e., a transmission microscope and light intensity measurement based on objective positioning) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Second, all the claim requires is that the light power is measured near a specimen since the detector is integrated in the specimen table. Nishi clearly teaches a detector (58) integrated into a specimen table (57, the specimen is the wafer W) for measuring light power/intensity (column 9, lines 4-9) at the position.

### ***Conclusion***

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2872

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF  
June 17, 2004



**DREW A. DUNN**  
**SUPERVISORY PATENT EXAMINER**